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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,471	09/20/2006	Yoshiaki Kumamoto	285480US0PCT	5691

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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER
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NAMAY, DANIEL ELLIOT

ART UNIT	PAPER NUMBER
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3749

NOTIFICATION DATE	DELIVERY MODE
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05/12/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/566,471	<b>Applicant(s)</b> KUMAMOTO ET AL.	
	<b>Examiner</b> Daniel E. Namay	<b>Art Unit</b> 3749	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 December 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) 12-23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 January 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____               |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                                     |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input checked="" type="checkbox"/> Other: <u>Advisory Action: Non-Compliant Preli Amendment</u> . |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :1/31/06, 4/17/06, 5/22/06, 9/20/06, 10/15/07, 4/25/08, 9/23/08, 6/15/09, 10/21/09.

## **DETAILED ACTION**

### ***Response To Amendment***

1. The Amendments submitted on 24 December 2009 have been received, & its contents have been carefully considered. The Examiner wishes to thank the Applicants for the response to the Examiner's action and for amending the claims in the appropriate manner. In response to the amendment, Claims 12-23 are withdrawn.

### ***Election / Restriction***

2. Claims 12-23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected subcombination, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 27 November 2009.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show Ref. #4 in Fig. 3 as described in Para. 111 of the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as

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“amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claim 6 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. Claim 6 recites the limitation "the surfacing member" in Line 1. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-3, 5, 6, 10 & 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP-2572621, hereinafter referred to as **JP-621**.

10. In Re Claim 1, **JP-621 (See attached TRANSLATION)** discloses all aspects of the claimed invention, including:

A. A warming device of sheet form comprising:

- i. (**P. 1, Under "Industrial Application"**) a heat generating molded article prepared by papermaking (**P. 3, Ln. 10-15**) and containing an oxidizable metal (**Iron Powder**), a moisture retaining agent (**Activated Carbon**), and

a fibrous material; and an air permeable holder holding the heat generating sheet (**#2**),

- ii. the warming device having a thickness of 0.1 to 10 mm (**P. 3, Ln. 13-14: 2-8mm, preferably 0.2-10mm**);

B. Except: a flexural strength of 0.01 to 0.3 N/cm. Nevertheless, it was well known at the time of the invention that the flexural strength is related to thickness of the sheet material. it would have been obvious to one of ordinary skill in the art at the time of the invention to select the flexural strength in the range specified as required to maintain component integrity.

11. In Re Claim 10, **JP-621** discloses the warming device, heat generating molded article, oxidizable metal, a moisture retaining agent, fibrous material & air permeable holder, as discussed in Claim 1 above, & further discloses no insulating sheet between the air permeable sheet & molded sheet (**Fig. 1, 2: No insulating layer is shown**).

12. In Re Claim 2, the thickness, in the range of 0.1-2.0mm, has been discussed in Claim 1 above.

13. In Re Claim 3, **JP-621** discloses all aspects of the claimed invention except: the fibrous material has a CSF of 600 ml or less. However, it is a matter of design choice for one skilled in the art at the time of the invention to optimize the CSF of the fibrous material for the required application.

14. In Re Claim 5, **JP-621** discloses: the holder comprises an air permeable sheet and an air impermeable sheet joined together (**P. 3, Ln. 18-24**), and has a surfacing

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member disposed on the outer surface of each of the air permeable sheet and the air impermeable sheet (**Adhesive Layer #4**).

15. In Re Claim 6, **JP-621** discloses: the surfacing member on the air impermeable sheet retains a functional preparation (**The adhesion of Adhesive Layer #4 is a functional preparation**).

16. In Re Claim 11, the thickness of the warming device has been discussed in Claim 1 above. The range of 1-30mm would have been an obvious matter of design choice since applicant has not disclosed that a thickness greater than 10mm solves any stated problem or is for any particular purpose (**Para. 34**) and it appears that the invention would perform equally well with a thickness in the range up to 10mm..

17. Claim 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over **JP-621**, as applied to Claim 1 above, in view of JP-2003-102761, referred to as **JP-761**.

18. In Re Claim 4, **JP-621** discloses all aspects of the claimed invention except: the molded sheet contains 50% by weight or more of the components other than the fibrous material.

A. Nevertheless, **JP-761** discloses material component other than fibrous material being 50% or greater (**Para. 10-15**)

B. It would have been obvious to one of ordinary skill in the art at the time of the invention to provide the non-fibrous components of **JP-621** at the percentage

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taught by **JP-761** to provide the desired / required amount of heat generation  
(**Para. 11**).

19. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over **JP-621** in view of **JP-1-158762**.

20. In Re Claim 7, **JP-621** discloses the warming device, heat generating molded article, oxidizable metal, a moisture retaining agent, fibrous material & holder, as discussed in Claim 1 above.

A. However, **JP-621** fails to disclose: the warming device further comprising a non-liquid retentive, heat insulating sheet disposed in the holder.

B. Nevertheless, **JP-1-158762** discloses an insulating layer (**#1**).

C. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the insulating layer of **JP-1-158762** into the article of **JP-621** to disperse the heat in the desired direction.

21. In Re Claim 8, the thickness & flexural strength have been discussed in Claim 1 above.

22. In Re Claim 9, the air permeable sheet has been discussed in Claim 5 above, & **JP-1-158762** further discloses the heat insulating sheet (**#1**) not disposed between the air permeable sheet (**#3**) and the molded sheet (**#2**).

***Response To Arguments***

23. Applicant's argument beginning on P. 2 of the amendment with respect to the validity of the restriction has been fully considered. However, Examiner respectfully disagrees. The claims comprise four distinct groups, as stated in the restriction of the previous office action. The groups comprise a combination, Group I, & three separate subcombinations, groups II-IV. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the warming devices of Claims 1, 7 & 10 (Group I) do not require the heat generating molded articles of Claims 12, 17 & 20, specifically with air impermeable layers recited in Claim 12 (Group II), projections, depressions & breaking length recited in Claim 17 (Group III), & the holes recited in Claim 20 (Group IV). The subcombinations of Groups II-IV have separate utility such as stand-alone heat generating sheets not requiring the holding bag of Group I. Further, the Applicant-supplied International Search Report on application PCT/JP2004/010800 required similar restrictions which applicants accepted without protest (**P. 3, Box 4: NO PROTEST box was checked**). The restriction requirement is maintained.

***Conclusion***

24. The prior art made of record and not relied upon and is considered pertinent to applicant's disclosure is disclosed in Form PTO-892.

25. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel E. Namay whose telephone number is (571) 270-5725. The examiner can normally be reached on Mon - Fri (Alt Fri) 7:00am - 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven B. McAllister can be reached on (571) 272-6785. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Daniel E. Namay/  
Examiner, Art Unit 3749

/Steven B. McAllister/  
Supervisory Patent Examiner, Art Unit 3749